

## IRIDIUM™ GSM TRACKER: MODEL 9602-GSM



- ✓ Capable of selecting in real-time Iridium, GSM or both networks
- ✓ Onboard geofencing with ability to load different shapes
- ✓ Programmed for either DoD or commercial gateway
- ✓ Ultra-low power consumption
- ✓ 256-bit AES encryption
- ✓ Real-time two-way communications allowing remote configuration from a command center workstation
- ✓ Real-time GPS reporting
- ✓ Pole-to-pole global coverage
- ✓ Weighs less than 7 ounces
- ✓ Volume of 3.5" x 2.0" x 1.1"
- ✓ Easy to install and can be used as personnel tracking device
- ✓ Emergency alert switch
- ✓ LEDs displaying Iridium and GSM status, and successful transmissions
- ✓ Integrated motion sensor
- ✓ Seven I/Os for sensor interfaces
- ✓ One serial for sensor interface
- ✓ 50-channel GPS receiver with -160 dBm sensitivity

### IRIDIUM™ GSM TRACKER: MODEL 9602-GSM

The 9602-GSM is a pocket-size, low-cost, Iridium/GSM tracker designed to operate with the Iridium satellite network and any cellular network. It is a self-contained device relying on an extremely low-power internal micro-controller for operation. The 9602-GSM measures 3.5" x 2.0" x 1.1" and weighs less than 7 ounces.

The 9602-GSM can be programmed to use a primary network, either Iridium or GSM, or to automatically switch between networks based on a predefined set of conditions. It has a real-time clock allowing scheduled call outs at specific GMT. It supports onboard geofencing with ability to load different shapes including circular, rectangular and polygons.

The 9602-GSM is designed with ultra-low power consumption electronics. At stand-by mode, the unit draws less than 65µA in the range of 3.5VDC to 5.5VDC input. Therefore, with a 2A-Hr Li-battery (the size of an AA Alkaline battery), it is capable of delivering uninterrupted service of up to two years with two reports per day. Battery life can be further extended by using a built-in motion sensor and geofencing algorithms to reduce reporting frequency when a platform is not in motion.

The 9602-GSM can send either a standard or a 256-bit AES encrypted GPS report at a pre-programmed interval ranging from continuous to once every seven days. The interval can be changed remotely while the unit is in the field. There is an available serial port that can be used to communicate with an external sensor or data terminal equipment (DTE) such as a PDA. There are also seven discrete I/Os for external sensor interfaces as well.

The 9602-GSM has a guarded Emergency switch to alert the recipient of an emergency situation. It has six LEDs providing the status of power input, GPS fix, Iridium connection, GSM connection, transmission status and emergency alert.

9602-GSM TRACKER

POWERED by the IRIDIUM/GSM NETWORKS



# IRIDIUM™ GSM TRACKER: MODEL 9602-GSM



- ✓ Pocket-size, self-contained satellite tracker
- ✓ Ultra-low power consumption
- ✓ AES 256-bit encryption both transmit/receive
- ✓ Two-way communications
- ✓ Real-time reporting
- ✓ Truly global coverage

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## Model 9602-GSM Specifications

### Mechanical

Dimensions:	3.5" L x 2.0" W x 1.1" D
Weight:	6.4 oz.
I/O Interface:	15-Pin D-Sub or 19-Pin circular connector
Antennas Interface:	Color-coded SMA female connectors
Enclosure:	Aluminum (hard-plastic is available for light-weight version)

### Electrical

Input Voltage Range:	3.6VDC to 5.5VDC
Power consumption during standby:	Less than 65 $\mu$ A @ 5.0VDC
Power Input Type:	External DC power

### Iridium RF Module

Operating Frequency:	1616 to 1626.5 MHz
Link Margin Downlink:	13 dB average
Link Margin Uplink:	7 dB average
Average Power Transmission:	< 1.0 W

### GSM Module

Receiver Type:	u-blox LEON-G100, Quad-Band 850/900/1800/1900 MHz
Sensitivity:	-110 dBm @850/900 MHz, -109 dBm @1800/1900 MHz

### GPS Receiver

Receiver Type:	u-blox NEO-6Q, 1575.42 MHz (L1), 16-channel, C/A code, 5Hz
Accuracy:	2.5 m CEP
Start-up Times:	1 second hot-starts, 28 seconds warm- and cold-starts
Sensitivity:	-160 dBm

### Environmental

Operating Temperature:	-40°F to +185°F
Operating Humidity:	< 75% RH